What is claimed is:

1. A spatially controlled plasma reactor for processing a substrate, comprising:

a process chamber within which a plasma is both ignited and sustained for the processing;

a power delivery mechanism comprising,

a single power source for generating energy sufficiently strong to ignite and sustain the plasma;

an electrode coupled to the power source, the electrode having a first coil and a second coil, the first coil being arranged to produce an electric field inside a first power region of the process chamber and the second coil being arranged to produce an electric field inside a second power region of the process chamber;

a power distribution switch disposed between the power source and the inner and outer coils of the electrode, the power distribution switch being arranged for directing the energy of the power source between the inner and outer coils; and

a gas delivery mechanism comprising,

a single gas source for generating a process gas which is used in part to form the plasma and to process the substrate;

a first gas injection port coupled to the gas source, the first gas injection port being arranged to release the process gas into a first gas region of the process chamber;

a second gas injection port coupled to the gas source, the second gas injection port being arranged to release the process gas into a second gas region of the process chamber; and

a gas distribution switch disposed between the gas source and the inner and outer gas injection ports, the gas distribution switch being arranged for directing the process gas of the gas source between the inner and outer gas injection ports.

2. A method for processing a work piece with a component of a process recipe, comprising:

providing a process chamber within which the work piece is processed, and which includes at least a first processing zone and a second processing zone, each zone representing a portion of the work piece to be processed;

outputting the component into the first processing zone of the process chamber;

switching from the first processing zone to the second processing zone so as to effect the concentration of the component between the first and second processing zones; and

outputting the component into the second processing zone of the process chamber.

3. The method as recited in claim 2 further including varying the magnitude of the component between each of the processing zones such that the magnitude of the component at the first processing zone is different than the magnitude of the component at the second processing zone.

4. The method as recited in claim 2 further including varying the amount of time that the component is outputted between each of the processing zones such that the outputting time at the first processing zone is different than the outputting time at the second processing zone.

5. The method as recited in claim 2 further including varying the constituents of the component between each of the processing zones such that the constituents of the component at the first processing zone is different than the constituents of the component at the second processing zone.

6. The method as recited in claim 2 further including varying the ratio of constituents of the component between each of the processing zones such that the ratio at the first processing zone is different than the ratio of the component at the second processing zone.

7. The method as recited in claim 2 further including,

varying the magnitude of the component between each of the processing zones such that the magnitude of the component at the first processing zone is different than the magnitude of the component at the second processing zone;

varying the amount of time that the component is outputted between each of the processing zones such that the outputting time at the first processing zone is different than the outputting time at the second processing zone;

varying the constituents of the component between each of the processing zones such that the constituents of the component at the first processing zone is different than the constituents of the component at the second processing zone; and

varying the ratio of constituents of the component between each of the processing zones such that the ratio at the first processing zone is different than the ratio of the component at the second processing zone.

8. The method as recited in claim 2 wherein the first processing zone corresponds to a center portion of the work piece and the second processing zone corresponds to an outer portion of the work piece.

9. The method as recited in claim 2 further including supplying the component from a single component source.

10. The method as recited in claim 2 wherein the component is a plasma forming component.

11. The method as recited in claim 10 wherein the component is energy.

12. The method as recited in claim 11 wherein the steps of outputting the component includes producing an electric field inside the process chamber.

13. The method as recited in claim 10 wherein the component is gas.

14. The method as recited in claim 10 wherein the steps of outputting the component includes releasing a gaseous source material inside the process chamber.

15. A method of forming a plasma inside a process chamber, comprising:

receiving a plasma forming component from a single component source;

alternately distributing the received plasma forming component between two different regions of the process chamber so as to effect the concentration of the plasma forming component in the different regions of the process chamber.

16. The method as recited in claim 15 wherein the different regions include an inner region and an outer region.

17. The method as recited in claim 15 wherein the plasma forming component is gas.

18. The method as recited in claim 15 wherein the plasma forming component is energy.

19. The method as recited in claim 15 further including,

receiving a second plasma forming component from a second single component source, the second plasma forming component being different than the first plasma forming component; and

alternately distributing the received second plasma forming component between two different regions of the process chamber so as to effect the concentration of the second plasma forming component in the different regions of the process chamber.

20. The method as recited in claim 19 wherein the first plasma forming component is gas and the second plasma forming component is energy.